

WHAT IS CLAIMED IS:

1 1. A method for improving visual depiction of animation splines in a
2 computer assisted animation system comprising:
3 producing a source spline formed of paths between a sequence of knots to
4 define a path between a first end knot and a second end knot;
5 displaying said source spline on a computer display monitor of said computer
6 assisted animation system wherein first axes represent time and second axes represent
7 distance;
8 analyzing said spline to designate pose knots and timing knots between said
9 first and second end knots, wherein at least one timing knot is established between successive
10 pose knots;
11 thereafter producing a flipped spline wherein first axes through said pose
12 knots are reversed;
13 displaying said flipped spline on the computer display monitor as a sawtooth
14 for evaluation and to allow adjustment of said source spline;
15 adjusting said source spline to obtain smoother transitions between end knots;
16 and
17 using said spline to produce an animation sequence.

1 2. The method according to claim 1 further including the step of:
2 upon inserting a new pose knot between two existing pose knots, causing all
3 pose knots following the new pose knot to flip so that the sawtooth is preserved.

1 3. A frame of animation including an image determined in claim 1.

1 4. In a computer assisted animation system an apparatus for improving
2 visual depiction of animation splines comprising:
3 an input device operative to produce a source spline formed of paths between
4 a sequence of knots to define a path between a first end knot and a second end knot;
5 a display for displaying said source spline on a computer display monitor of
6 said computer assisted animation system, wherein first axes represent time and second axes
7 represent distance;

8 computer software operative to analyze said spline to designate pose knots and
9 timing knots between said first and second end knots, wherein at least one timing knot is
10 established between successive pose knots;
11 computer software operative to produce a flipped spline wherein first axes
12 through said pose knots are reversed;
13 said display operative to display said flipped spline as a sawtooth for
14 evaluation and to allow adjustment of said source spline;
15 an input device operative for adjusting said source spline to obtain smoother
16 transitions between end knots; and
17 an output device operative to use said spline to produce an animation
18 sequence.